

Appln. No. 09/849,524
Amdt. Dated August 11, 2003
Reply to Office Action of April 10, 2003
Docket No. 1501-1144

R E M A R K S

This application has been amended so as to place it in condition for allowance at the time of the next Office action.

The Office action requires a substitute specification. Applicant has carefully reviewed the entirety of the specification and includes herewith the requested substitute specification, incorporating corrections of all identified typographic errors. The substitute specification is presented in both clean and marked-up forms. No new matter has been added to the application by way of such substitute specification.

The Office action objects to the drawings as failing to comply with Rule 1.84(p)(5), based on the illustration of an element identified by reference numeral 25 in Figure 1A, without a corresponding description of such element in the specification.

Please note that the substitute specification includes the amendment of several passages originally referring to element 3A instead of element 25. It is clear that the original designation of element 3A in the modified passages is erroneous, at least by virtue of the description elsewhere in the specification of element 3A as a sensor, as well as the description of the element 3A being located between elements 18A and 18B, which clearly should refer to element 25.

In light of such amendment to the specification, reconsideration and withdrawal of this objection to the drawings are respectfully requested.

The Office action objects to claims 1, 3, 4, 9, 17, 18, 25, 30, 32, 34, 35, 39, 49, 54, and 62 based on identified informalities. Please note that applicant has carefully reviewed each of the identified claims, and amended the same as necessary in order to eliminate the bases for this objection. Reconsideration and withdrawal of this objection are therefore respectfully requested.

The Office action rejects claims 6, 12, 14, 17, 23, 29-31, 46, and 47 under 35 USC §112, second paragraph as being indefinite. The Office action identifies the language underlying the various bases for this rejection. Please note that applicant has carefully reviewed each of the rejected claims, and amended the same as necessary in order to eliminate the perceived indefiniteness. Reconsideration and withdrawal of this rejection are therefore respectfully requested.

The Office action rejects claims 1, 2, 10-19, 27-34, 37, 38, and 52-59 under 35 USC §103(a) as being unpatentable over WOOD in view of SEKIDA. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

The WOOD patent (as well as the later-applied BLACK patent) relates to prior art IR cameras having focusing systems

that are fixed to the camera, i.e., the focusing systems of these cameras cannot be exchanged.

The SEKIDA patent describes an ordinary (non-IR) camera for taking still photographs, having a removable focusing system.

Thus, the camera of SEKIDA is fundamentally different from the camera of WOOD, and correspondingly, the focusing system of SEKIDA is not the same kind of focusing system used in the other reference. Further, the removable focusing system of SEKIDA does not comprise storage means that store calibration information about the components of the focusing system, or downloading means for downloading this information.

The storage means and downloading means serve to eliminate the need to send the camera off for calibration each time the focusing system is replaced, thus effectively making it possible to replace the focusing system without sending the camera back to the manufacturer.

Because of the differences discussed above, there exists no motivation for one of skill in the art to even try to apply the teachings of SEKIDA to the camera of WOOD, given the differences between traditional optical cameras and IR cameras and their respective optical focusing systems. Furthermore, even if the skilled person were to try to combine them, he could not possibly arrive at the camera of claim 1.

The invention recited in claim 27 is not designed to achieve non-uniformity correction of a shutter function, which is known from the prior art. The applied WOOD patent discloses closing the shutter and detecting what could be seen as a steady state signal.

In contrast, claim 27 defines a shutter comprising means for registering when the shutter is fully closed, by the use of a histogram. The feature of using a histogram, together with the shutter close signal to determine when a steady state is reached, indicating that the shutter is completely closed, is not disclosed anywhere in the prior art, including the applied references.

Prior art systems generally detect that the shutter is closed by use of a particular detector, the need for which is eliminated by the invention. According to the invention, the IR signal itself is used. The signal from each of the sensors is evaluated and the values are plotted in a histogram. This histogram is used in the prior art for color distribution, i.e., for finding out in what range temperature information is found, coloring this range, and showing it to the user. The shape of the histogram can be used to evaluate a steady state. Together with the shutter close signal this steady state indicates that the shutter has been completely closed.

Nothing in the known prior art would provide even a slight hint at the possibility of this solution as recited in claim 27.

None of the prior art documents discloses an IR camera having a removable optical focusing system, with such removable focusing system comprising storage means holding calibration parameters related to the optical focusing system, as is now recited in claim 29. Claim 52 also recites a storage element that contains calibration parameters related to the optical elements.

Claim 58 should be allowable over the prior art for the same reasons provided above in connection with claim 27. The prior art does not disclose the inventive method for determining when the shutter is completely closed. The skilled person is not taught by the prior art how to use the histogram together with the shutter close signal to detect that the shutter had been closed.

The Office action rejects claims 1, 3, 35, and 36 under 35 USC §103(a) as being unpatentable over BLACK view of SEKIDA. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

The BLACK reference offers no more teaching or suggestion related to the present invention than does the WOOD reference combined with the SEKIDA reference in the immediately

preceding obviousness rejection. Accordingly, the analysis offered above in connection with the WOOD/SEKIDA combination is equally applicable to the SEKIDA/BLACK combination.

For the same reasons provided in connection with claim 1, claim 35 recites features neither taught nor suggested by the prior art. The features of providing an optical focusing system comprising storage means comprising calibration information about the components of the focusing system, or downloading means for downloading this information, are disclosed neither by SEKIDA nor BLACK, nor by any other known prior art document.

The Office action rejects claims 46-51 under 35 USC §103(a) as being unpatentable over BLACK in view of SEKIDA, and also in view of WOOD. Reconsideration and withdrawal of this rejection are respectfully requested for the following reasons:

Each of the references applied in the present obviousness rejection has been applied in at least one of the two obviousness rejections discussed above. The analysis offered above is no less pertinent to the present rejection.

Each of the rejected claims depends from independent claim 35, which, as discussed above, recites providing an optical focusing system comprising storage means comprising calibration information about the components of the focusing system, and downloading means for downloading this information. None of such features is disclosed either by BLACK, SEKIDA, or WOOD.

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The Office action identifies claims that are allowable but for their dependence from rejected base claims. Applicant notes, however, that among the identified claims are independent claims 20 and 60. Applicant assumes that such claims are already allowed.


Entry of the above amendments is earnestly solicited. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. \$1.16 or under 37 C.F.R. \$1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item(s):

- a Substitute Specification and a marked-up copy of the originally-filed specification